



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/533,767

12/06/2005

Thomas Brandt

5776-000002/NP

8207

27572 7590 07/30/2010  
HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. BOX 828  
BLOOMFIELD HILLS, MI 48303

EXAMINER

FLOHRE, JASON A

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

07/30/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/533,767	<b>Applicant(s)</b> BRANDT ET AL.	
	<b>Examiner</b> JASON A. FLOHRE	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/18/2010</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Response to Arguments***

Applicant's arguments filed 18 May 2010 have been fully considered but they are not persuasive.

1. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (Page 4 line 18 of Remarks), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).
2. In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references (Page 6 lines 3-5 of Remarks), the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, Maguire teaches that an omission of torsions is a simplification (Column 4 lines 11-14). It is known in the art

Art Unit: 2622

that vestibulo-ocular reflex is an eye torsion which is opposite the torsion of the head. Therefore, by not simplifying Maguire and retaining the measurement of all three axes of movement, a more accurate image accounting for vestibulo-ocular reflex is formed.

3. Applicant argues that Smyth fails to disclose analyzing involuntary eye movements (Page 6 lines 12-20 of Remarks). Applicant reaches this conclusion based on the assertion that all saccadic movements are voluntary. However, the Examiner disagrees. Saccadic movements are involuntary. "Determination of the Stimuli for Involuntary Drifts and Saccadic Eye Movements" (Cornsweet. Journal of the Optical Society of America Vol. 46 No. 11 November 1956 Pages 978-993) teaches that involuntary eye movement is categorized into four types: tremor, slow wave of irregular frequency and extent, slow drifts, and rapid flicks or saccadic movements (Introduction, Paragraph 1 lines 2-7 Page 987). Therefore, the Applicant's argument is not persuasive.

In view of the foregoing, the Examiner's rejections are maintained.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2622

1. Claims 19, 24-27, 29, 30, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamprecht (United States Patent 5,875,018) in view of Maguire, Jr. (United States Patent 7,439,940), hereinafter referenced as Maguire.

Regarding claim 19 Lamprecht discloses a recording device for image recording having a recording unit (cameras 5 and 6 mounted on a helmet exhibited in figure 1 as disclosed at column 4 lines 59-60), having a sensor device for detecting eye movements of the user (CCD cameras 1 and 2, exhibited in figure 1, detect eye movement as disclosed at column 4 lines 53-55) and an analysis unit (figure 1 exhibits evaluation device 3 which supplies information regarding a user's eye position as disclosed at column 4 lines 55-58), connected downstream from the sensor unit (figure 1 exhibits evaluation device 3 being downstream from the sensor unit), which generates control signals that are applied to an actuator acting on the recording unit, through which the image section detected by the recording unit is movable (adjustment devices 7 and 8 move cameras 5 and 7 according to any change in the angle of vision of the user's eye as disclosed at column 4 lines 65-67), wherein the sensor device detects pitching and yawing movements of at least one eye of the user and the analysis unit analyzes the detected eye movements and generates control signals therefrom, which cause the actuator to move the image section detected by the recording unit so it follows the detected and analyzed eye movements (adjustment devices 7 and 8 move cameras 5 and 7 according to any change in the angle of vision of the user's eye as disclosed at column 4 lines 65-67. "Any change in the angle of vision" would include

Art Unit: 2622

pitch and yaw movements). However, Lamprecht fails to disclose detecting rolling movements of at least one eye of the user.

However, in a similar field of endeavor Maguire discloses passive virtual reality. In addition Maguire discloses detecting rolling movements of at least one eye of the user (column 27 lines 14-16 disclose eye position monitors which measure torsion of the eye. Torsion of the eye is the rolling of the eye. Vertical and horizontal ductions which are also measured by the eye position monitors refer to yaw and pitch).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing detecting rolling movements of at least one eye of the user, as taught by Maguire, for the purpose of accounting for vestibule-ocular reflex which occurs due to head rotation.

Regarding claim 24, Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 19), in addition, Lamprecht discloses wherein a projection device for projecting the images recorded by the recording unit in the viewing field of the user (the image is projected by projection devices 9 or 10 on screen 12 which is placed before the user's eye as disclosed at column 5 lines 7-9).

Regarding claim 25, Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 19), in addition Lamprecht discloses whose recording unit has at least one optical camera (cameras 5 and 6 exhibited in figure 1 as disclosed at column 4 lines 59-60).

Regarding claim 26, Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 19), in addition, Lamprecht discloses wherein the recording

Art Unit: 2622

unit has a mount rotatable around 3 spatial axes (adjustment devices 7 and 8 move cameras 5 and 7 according to any change in the angle of vision of the user's eye as disclosed at column 4 lines 65-67. "Any change in the angle of vision" would include all 3 spatial axes).

Regarding claim 27, Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 19), in addition, Lamprecht discloses wherein a sensor device is assigned to each eye of the user (CCD cameras 1 and 2 one of which is assigned to each eye as, exhibited in figure 1, detect eye movement as disclosed at column 4 lines 53-55).

Regarding claim 29 Lamprecht discloses everything claimed as applied above (see claim 27), in addition, Lamprecht discloses wherein a camera, is assigned to each eye of the user (Lamprecht discloses a camera 5 assigned to the leading eye and camera 6 assigned to the weaker eye as disclosed at column 5 lines 12-15). However Lamprecht fails to disclose which follows the movements of the respective eye.

However, Maguire discloses which follows the movements of the respective eye (column 27 lines 1-10 disclose the eye position monitors 408 and 410 which monitor the right and left eye as well as right and left cameras 428 and 430 exhibited in figure 16. When combined with Lamprecht each coordinate system would be applied to its respective camera).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing which follows the

Art Unit: 2622

movements of the respective eye, as taught by Maguire, for the purpose of recording images which are identical to what the user sees.

Regarding claim 30 Lamprecht discloses a method for controlling a recording device, in which the eye movements of a user wearing the recording device are detected by a sensor device (eye movements are continuously detected as disclosed at column 5 lines 16-17) and analyzed by an analysis unit (evaluation unit 3 determines the actual position of the optical axes of both eyes) and in which an image section detected by a recording unit is moved with the aid of an actuator acting on the recording unit (cameras 5 and 6 constantly follow eye movement by use of adjusting devices 7 and 8 as disclosed at column 5 lines 22-24), wherein pitching and yawing movements of an eye of the user are detected by the sensor device, the detected movements are analyzed by the analysis unit and the image section of the recording unit is moved so it follows the detected and analyzed movements of the eye (adjustment devices 7 and 8 move cameras 5 and 7 according to any change in the angle of vision of the user's eye as disclosed at column 4 lines 65-67. "Any change in the angle of vision" would include pitch and yaw movements). However, Lamprecht fails to disclose detecting rolling movements of an eye of the user.

However, in a similar field of endeavor Maguire discloses passive virtual reality. In addition Maguire discloses detecting rolling movements of an eye of the user (column 27 lines 14-16 disclose eye position monitors which measure torsion of the eye. Torsion of the eye is the rolling of the eye. Vertical and horizontal ductions which are also measured by the eye position monitors refer to yaw and pitch).



Art Unit: 2622

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing detecting rolling movements an eye of the user, as taught by Maguire, for the purpose of accounting for vestibule-ocular reflex which occurs due to head rotation.

Regarding claim 34 Lamprecht discloses a method for image recording, which comprises adjusting for movement associated with a user, using a recording device comprising: a recording unit (cameras 5 and 6 mounted on a helmet exhibited in figure 1 as disclosed at column 4 lines 59-60), having a sensor device for detecting eye movements of the user (CCD cameras 1 and 2, exhibited in figure 1, detect eye movement as disclosed at column 4 lines 53-55) and an analysis unit (figure 1 exhibits evaluation device 3 which supplies information regarding a user's eye position as disclosed at column 4 lines 55-58), connected downstream from the sensor unit (figure 1 exhibits evaluation device 3 being downstream from the sensor unit), which generates control signals that are applied to an actuator acting on the recording unit, through which the image section detected by the recording unit is movable (adjustment devices 7 and 8 move cameras 5 and 7 according to any change in the angle of vision of the user's eye as disclosed at column 4 lines 65-67), wherein the sensor device detects pitching and yawing movements of at least one eye of the user and the analysis unit analyzes the detected eye movements and generates control signals therefrom, which cause the actuator to move the image section detected by the recording unit so it follows the detected and analyzed eye movements (adjustment devices 7 and 8 move cameras 5 and 7 according to any change in the angle of vision of the user's eye as

Art Unit: 2622

disclosed at column 4 lines 65-67. "Any change in the angle of vision" would include pitch and yaw movements). However, Lamprecht fails to disclose detecting rolling movements of at least one eye of the user and wherein said recording device is used for recording films.

However, Maguire discloses detecting rolling movements of at least one eye of the user (column 27 lines 14-16 disclose eye position monitors which measure torsion of the eye. Torsion of the eye is the rolling of the eye. Vertical and horizontal ductions which are also measured by the eye position monitors refer to yaw and pitch) and wherein said recording device is used for recording films (column 8 lines 44-45 disclose transmitting the images for viewing by a passive viewer. The images viewed by the passive viewer are a film).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing detecting rolling movements of at least one eye of the user and wherein said recording device is used for recording films, as taught by Maguire, for the purpose of accounting for vestibule-ocular reflex which occurs due to head rotation and allowing remote viewers to experience the same scenes that the user experienced.

Regarding claim 36 Lamprecht discloses a method for image recording, which comprises adjusting for movement associated with a user, using a recording device comprising: a recording unit (cameras 5 and 6 mounted on a helmet exhibited in figure 1 as disclosed at column 4 lines 59-60), having a sensor device for detecting eye movements of the user (CCD cameras 1 and 2, exhibited in figure 1, detect eye

Art Unit: 2622

movement as disclosed at column 4 lines 53-55) and an analysis unit (figure 1 exhibits evaluation device 3 which supplies information regarding a user's eye position as disclosed at column 4 lines 55-58), connected downstream from the sensor unit (figure 1 exhibits evaluation device 3 being downstream from the sensor unit), which generates control signals that are applied to an actuator acting on the recording unit, through which the image section detected by the recording unit is movable (adjustment devices 7 and 8 move cameras 5 and 7 according to any change in the angle of vision of the user's eye as disclosed at column 4 lines 65-67), wherein the sensor device detects pitching and yawing movements of at least one eye of the user and the analysis unit analyzes the detected eye movements and generates control signals therefrom, which cause the actuator to move the image section detected by the recording unit so it follows the detected and analyzed eye movements (adjustment devices 7 and 8 move cameras 5 and 7 according to any change in the angle of vision of the user's eye as disclosed at column 4 lines 65-67. "Any change in the angle of vision" would include pitch and yaw movements). However, Lamprecht fails to disclose detecting rolling movements of at least one eye of the user and wherein said recording device is used for monitoring the viewing direction of test subjects.

However, Maguire discloses detecting rolling movements of at least one eye of the user (column 27 lines 14-16 disclose eye position monitors which measure torsion of the eye. Torsion of the eye is the rolling of the eye. Vertical and horizontal ductions which are also measured by the eye position monitors refer to yaw and pitch) and wherein said recording device is used for monitoring the viewing direction of test

Art Unit: 2622

subjects (column 8 lines 44-45 disclose transmitting the images for viewing by a passive viewer. The images viewed by the passive viewer would be a way to evaluate the viewing direction of the user. The fact that the user is a test subject would be a choice based on the parties using the device).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing detecting rolling movements of at least one eye of the user and wherein said recording device is used for monitoring the viewing direction of test subjects, as taught by Maguire, for the purpose of accounting for vestibule-ocular reflex which occurs due to head rotation and allowing remote viewers to evaluate what the user is seeing and to further train the user based on the information.

2. Claims 20, 21, 31, 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamprecht in view of Maguire in view of Smyth (United States Patent 5,583,795).

Regarding claim 20, Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 19), however, Lamprecht fails to disclose wherein the analysis unit analyzes voluntary and involuntary eye movements performed by the user.

However, in a similar field of endeavor Smyth discloses an apparatus for measuring eye gaze. In addition Smyth discloses wherein the analysis unit analyzes voluntary and involuntary eye movements performed by the user (column 8 lines 58-67 disclose classifying eye movement as fixations, which are later grouped into voluntary

Art Unit: 2622

meaning gaze movements, and saccadic movements, which are involuntary movement).

Therefore, it would have been obvious to one of ordinary skill in the art to modify Lamprecht by specifically providing wherein the analysis unit analyzes voluntary and involuntary eye movements performed by the user, as taught by Smyth, for the purpose of reducing blur in the captured image by not using eye movements too fast to be accurately repeated by an actuator.

Regarding claim 21, Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 19), however, Lamprecht fails to disclose wherein the analysis unit has an intrasaccadic suppression device, which suppresses reproduction of the images recorded by the recording unit if the velocity of the eye movement of the user exceeds a predefined limiting value.

However, Smyth discloses wherein the analysis unit has an intrasaccadic suppression device, which suppresses reproduction of the images recorded by the recording unit if the velocity of the eye movement of the user exceeds a predefined limiting value (column 14 lines 36-40 disclose classifying all movements above a velocity as saccadic. Column 8 lines 60-65 disclose using only the fixations to determine gaze movements. Therefore, while only saccadic movements are present the image would not change and the recorded image would be equivalent to a fixed image determined before the saccadic movements were present. By fixing the image and ignoring saccadic movements the device is suppressing reproduction of images which would be captured using saccadic movement).

Art Unit: 2622

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing wherein the analysis unit has an intrasaccadic suppression device, which suppresses reproduction of the images recorded by the recording unit if the velocity of the eye movement of the user exceeds a predefined limiting value, as taught by Smyth, for the purpose of eliminating images which when reproduced would have too much blur to be useful.

Regarding claim 31, Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 30), however, Lamprecht fails to disclose wherein voluntary and involuntary movements of an eye of the user are detected and analyzed.

However, Smyth discloses wherein voluntary and involuntary movements of an eye of the user are detected and analyzed (column 8 lines 58-67 disclose classifying eye movement as fixations, which are later grouped into voluntary meaning gaze movements, and saccadic movements, which are involuntary movement).

Therefore, it would have been obvious to one of ordinary skill in the art to modify Lamprecht by specifically providing wherein voluntary and involuntary movements of an eye of the user are detected and analyzed, as taught by Smyth, for the purpose of reducing blur in the captured image by not using eye movements too fast to be accurately repeated by an actuator.

Regarding claim 32 Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 30), however, Lamprecht fails to disclose wherein the display of images recorded with the aid of the recording unit is suppressed in the event of movements whose velocity exceeds a predefined limiting value.

However, Smyth discloses wherein the display of images recorded with the aid of the recording unit is suppressed in the event of movements whose velocity exceeds a predefined limiting value (column 14 lines 36-40 disclose classifying all movements above a velocity as saccadic. Column 8 lines 60-65 disclose using only the fixations to determine gaze movements. Therefore, while only saccadic movements are present the image would not change and the recorded image would be equivalent to a fixed image determined before the saccadic movements were present. By fixing the image and ignoring saccadic movements the device is suppressing reproduction of images which would be captured using saccadic movement).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing wherein the display of images recorded with the aid of the recording unit is suppressed in the event of movements whose velocity exceeds a predefined limiting value, as taught by Smyth, for the purpose of eliminating images which when reproduced would have too much blur to be useful.

Regarding claim 35 Lamprecht discloses a method for image recording, which comprises adjusting for movement associated with a user, using a recording device comprising: a recording unit (cameras 5 and 6 mounted on a helmet exhibited in figure 1 as disclosed at column 4 lines 59-60), having a sensor device for detecting eye movements of the user (CCD cameras 1 and 2, exhibited in figure 1, detect eye movement as disclosed at column 4 lines 53-55) and an analysis unit (figure 1 exhibits evaluation device 3 which supplies information regarding a user's eye position as

Art Unit: 2622

disclosed at column 4 lines 55-58), connected downstream from the sensor unit (figure 1 exhibits evaluation device 3 being downstream from the sensor unit), which generates control signals that are applied to an actuator acting on the recording unit, through which the image section detected by the recording unit is movable (adjustment devices 7 and 8 move cameras 5 and 7 according to any change in the angle of vision of the user's eye as disclosed at column 4 lines 65-67), wherein the sensor device detects pitching and yawing movements of at least one eye of the user and the analysis unit analyzes the detected eye movements and generates control signals therefrom, which cause the actuator to move the image section detected by the recording unit so it follows the detected and analyzed eye movements (adjustment devices 7 and 8 move cameras 5 and 7 according to any change in the angle of vision of the user's eye as disclosed at column 4 lines 65-67. "Any change in the angle of vision" would include pitch and yaw movements). However, Lamprecht fails to disclose detecting rolling movements of an eye of the user and wherein said recording device is used as a night-vision device.

However, in a similar field of endeavor Maguire discloses passive virtual reality. In addition Maguire discloses detecting rolling movements of an eye of the user (column 27 lines 14-16 disclose eye position monitors which measure torsion of the eye. Torsion of the eye is the rolling of the eye. Vertical and horizontal ductions which are also measured by the eye position monitors refer to yaw and pitch).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing detecting



Art Unit: 2622

rolling movements an eye of the user, as taught by Maguire, for the purpose of accounting for vestibule-ocular reflex which occurs due to head rotation.

However, Smyth discloses wherein said recording device is used as a night-vision device (column 22 lines 42-45 disclose using the device as night vision goggles).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing wherein said recording device is used as a night vision device, as taught by Smyth, for the purpose of allowing users to see scenes in the dark which would be equivalent to what they would see if the scene were properly illuminated.

3. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lamprecht in view of Maguire in view of Stuttler (United States Patent 6,580,448).

Regarding claim 22, Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 19), however, Lamprecht fails to disclose whose sensor device has an infrared mirror positioned in the viewing field of the user and an infrared camera directed toward the mirror area of the infrared mirror.

However, in a similar field of endeavor Stuttler discloses a device for the parallel capture of visual information. In addition, Stuttler discloses whose sensor device has an infrared mirror positioned in the viewing field of the user and an infrared camera directed toward the mirror area of the infrared mirror (column 4 lines 46-49 disclose positioning an infrared mirror in front of the eye and diverting the infrared image of the eye to an image sensor).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing whose sensor device has an infrared mirror positioned in the viewing field of the user and an infrared camera directed toward the mirror area of the infrared mirror, as taught by Stuttler, for the purpose of tracking eye movement without limiting the user's field of view.

4. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lamprecht in view of Maguire in view of Witt et al. (United States Patent Application Publication 2003/0156742), hereinafter referenced as Witt.

Regarding claim 23, Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 19), however, Lamprecht fails to disclose whose sensor device comprises a contact lens provided with induction coils.

However, in a similar field of endeavor Witt discloses an eye tracking system. In addition, Witt discloses whose sensor device comprises a contact lens provided with induction coils (paragraph 15, lines 1-4 discloses a search coil method in which coils embedded in contact lenses are used to track eye movement).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing whose sensor device comprises a contact lens provided with induction coils, as taught by Witt, for the purpose of increasing the accuracy of the eye tracking system.

5. Claims 28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamprecht in view of Maguire in view of Mann (United States Patent Application Publication 2002/0085843).

Art Unit: 2622

Regarding claim 28 Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 27), however, Lamprecht fails to disclose wherein the analysis unit analyzes the vergence position of the eyes of the user in order to generate an autofocus signal for the recording unit.

However, in a similar field of endeavor Mann discloses a wearable camera system. In addition Mann discloses wherein the analysis unit analyzes the vergence position of the eyes of the user in order to generate an autofocus signal for the recording unit (paragraph 124, lines 1-8 disclose using an autofocus camera which obtains a focus position based on the vergence of the wearer's eyes).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing wherein the analysis unit analyzes the vergence position of the eyes of the user in order to generate an autofocus signal for the recording unit, as taught by Mann, for the purpose of automatically focusing the camera on the same area that the user is focused on.

Regarding claim 33 Lamprecht in view of Maguire discloses everything claimed as applied above (see claim 30), however, Lamprecht fails to disclose wherein the vergence position of both eyes of the user is analyzed and used for focusing the recording unit.

However, in a similar field of endeavor Mann discloses a wearable camera system. In addition Mann discloses wherein the vergence position of both eyes of the user is analyzed and used for focusing the recording unit (paragraph 124, lines 1-8

Art Unit: 2622

disclose using an autofocus camera which obtains a focus position based on the vergence of the wearer's eyes).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamprecht by specifically providing wherein the vergence position of both eyes of the user is analyzed and used for focusing the recording unit, as taught by Mann, for the purpose of automatically focusing the camera on the same area that the user is focused on.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON A. FLOHRE whose telephone number is (571)270-7238. The examiner can normally be reached on Monday to Thursday 8:00 AM to 3:00 PM EST.

Art Unit: 2622

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 517-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sinh Tran/  
Supervisory Patent Examiner, Art  
Unit 2622

/JAF/